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ABSTRACT

Exemplars of research on academic programs are considered in relation to the qualities of research and types of information used as a framework for analysis. It is suggested that serious investigations of the postsecondary curriculum are characterized by: efforts to move from particularistic approaches to the stipulation of universalistic variables; a use of empirical research to initiate and clarify the rudimentary concepts now in use; and recognition that the reality of the situation has more complexity than most research designs can incorporate so that it is not desirable or necessary to seek practical results all the time. Research on the college curriculum has some parallels with field study in the social sciences. Principal methodological considerations suggested by Zelditch (1962) are: (1) histories and incidents (chronicles, interpretations, and synthesis incidents--cases and persons); (2) distributions and frequencies (normative and descriptive studies of effects, outcomes, and impacts); and (3) generally known rules and statuses (focusing on curriculum or critical processes). Historical analyses that carry the process of interrelating society and the curriculum to the point of synthesis are few. The study of incidents, which includes individual cases, ideas, and situations, has grown enormously since 1960, often under impetus from the Carnegie Commission. Building a quantitative framework within which curricula features can be placed and compared is important. The value of comprehensive data sets is increasing as uncertainty rises and more variability among students, institutions, and programs appears. Crane's formulation that a coherent field of study requires a cognitive structure and a system of social interaction and assessment is advocated. (SW)

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FINDING EXEMPLARS OF RESEARCH ON ACADEMIC PROGRAMS
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FINDING EXEMPLARS OF RESEARCH ON ACADEMIC PROGRAMS

WILLIAM TOOMBS

1982

INTRODUCTION

Finding exemplars for research on academic programs is, to coin a phrase, fraught with hidden assumptions. Nowhere on the landscape of academe do so many interests converge: Nowhere are as many trade-offs negotiated. The curriculum is a primary expression of institutional policy, the raison detre of departments, the main tool of production for teaching faculty, the absorber of institutional revenue, chief depository of major risks, and the carrier of principal effects for institutions as well as for students. In summarizing the nature of inquiry in such a field, particularly to this audience, there is extra hazard of both Type I and Type II errors; in overlooking a truly significant line of study or in failing to reject a fading line of research. One small consolation comes from dry New England wit of Rudolph who observed that, "Thinking about the curriculum...presents many problems and requires a willingness to accept surprise, ambiguity, and a certain unavoidable messiness. If the world does not always make sense, why should the curriculum?" (1977).

There are two familiar approaches to the undergraduate academic program that will not be considered. One is the extensive body of essay and opinion that has continuously flowed into the literature even when research efforts have waned. The other sector to be set aside deals with guidance for practice in the tasks of constructing, renewing, or modifying academic programs. However, this omission is not to suggest that the applied strain of thought makes no significant contribution.

By keeping the subject within reasonable bounds and reminding people that they may have to do what they say it has inestimable value (Bergquist, 1981; Chickering, 1977). While practice tests feasibility, other research specifies the substance of the topic. What this paper will do is identify the veins of inquiry that we keep coming back to because they offer an expanding set of questions. These are the areas susceptible to examination by a variety of research techniques. "Exemplar" is a formidable term, but it does not necessarily represent the ideal expression of a phenomenon. The term also denotes an entity that "serves as a pattern deserving of duplication." That part of the dictionary definition fits research efforts noted in the pages that follow, merit but not perfection. Mention has already been made earlier of an emphasis on undergraduate academic programs as representative curricula. Curriculum as used here is a design of educational experiences constructed by negotiation and intended to encourage particular outcomes, mostly intellectual, among those students who participate in it. Having set some boundaries and cleared the terminology we can turn to finding a suitable framework.

THE QUALITIES OF RESEARCH

The attributes of the collegiate curriculum as an object of study are unusual enough to warrant consideration of how any inquiry might fit into the usual patterns of research. The field is still in a state of formulation. There is a strong emphasis on application and often a belief hat research is a waste of time. The topic is certainly not the special province of any particular discipline, particularly at the postsecondary level, but rather falls within the scope of professional

interest for all academics. The conceptual elements and the terminology are rudimentary and ambiguous. There is a low susceptibility to transfer of concepts from other fields, at least so far. In short, the study of the college curriculum as a field of inquiry is clearly "artificial" in the sense that Simon (1969, 1981) had defined the term. In view of these conditions it is useful to lay out some of the features of social scientists, particularly sociologists, have found critical to their own field and to the sciences in general as they developed sociology of science.

One test of validity or maturity in a coherent field of study is the effectiveness with which knowledge is diffused as well as generated according to Crane (1972). Crane's emphasis on two dimensions of inquiry, (1) the development of a cognitive structure, (2) the elaboration of a system of social interaction, is matched by the observations of Blau (1960). In his view, two basic types of social facts can be distinguished, (1) a set of norms, values, beliefs, and information that is held in common, (2) networks of social interaction which impart distinctions of position and membership, organization, to groups. The two observations fit together to give a pair of essential features that should be evident in any coherent field of research. Insofar as research on the postsecondary curriculum is emerging as a discrete field we should expect to find evidence of these two dimensions. But they certainly aren't there now.

As a coherent knowledge area, only the dim outlines appear in the clouds of information. The curriculum has phenomenological qualities. It exists only as an observable event and not as a series of abstractions. This may explain why preoccupations with questions of

"mission" in curricular analysis contribute so little to the body of knowledge on the subject. Lines of research that emphasize an inductive process, the movement from "particularistic" variables toward "universalistic" variables, to use Parsons terms, are likely to be most promising (Parsons 1951/1964, p. 65). A serious handicap to inquiry is the deficiency of concepts and technical terminology--or even simple labels--for much of what goes on in a curriculum. Unfortunately borrowed concepts, even those of the ubiquitous general systems theorists, don't capture well the key features of an academic program. Finally we must take account of the reality that the curriculum is not an independent or discrete entity. Studying it has some similarity to anthropology where the kinship system, for example, must somehow be prized out of the cultural fabric of day to day existence.

Putting these features together we may hypothesize that serious investigations of the postsecondary curriculum will be marked by: (a) efforts to move from particularistic approaches to the stipulation of universalistic variables; (b) a use of empirical research to "initiate," "reformulate," "deflect," and clarify" the rudimentary concepts now in use, as Merton (1948) once suggested when sociology was at the threshold of expansion; (c) recognition that the reality of the situation has much more complexity than most research designs can handle so it isn't desirable or necessary to seek practical results all the time.

With respect to the networks of social interaction, membership or reference groups, that Crane and others see as important to systematic inquiry, they have a short history (Storer, 1966). Nothing resembling an "invisible college" has appeared in curriculum studies at the postsecondary level (Crane 1972). The absence of a recognized network

of personal influence and interaction weakens the intellectual development of the field because the same problems are addressed redundantly by successive generations of researchers. Accumulation of experience and grounded research are the accelerators for a field. By way of illustration it appears that one outcome of the Carnegie Commission was the creation of a social system and a growing body of research around the concepts and issues of institutional management. Nothing quite like that has materialized in research on academic programs. Neither has it emerged in K-12 curriculum studies in spite of the disposition to put "curriculum theory" on the program of every education conference. A good discussion of the current issues surrounding curriculum in the school setting is found in Giroux (1981).

To sum up: by even the simplest criteria the study of academic programs is in the earliest of embryonic states with respect to systematic research. That conclusion is not intended to deprecate the importance of what has been done. It should actually increase respect for what has been done and generate applause for those who are willing to step out into twilight or darkness occasionally.

TYPES OF INFORMATION AS A FRAMEWORK FOR ANALYSIS

Research on the collegiate curriculum has some parallels with field study in the social sciences. Zelditch presented the principal methodological considerations and suggested a basic classification based on three kinds of information or data that might be obtained (1962). His categories offer a convenient and, on the whole, accurate way of dividing major research efforts on the curriculum: (1) incidents and histories, (2) distributions and frequencies, and (3) generally

known rules and statuses. This typology simply puts data into classes and has nothing to do with what is "inferred" or "explained" from these data.

TYPE I HISTORIES AND INCIDENTS

Although it is difficult at this time to discern any dynamic force of an evolutionary or dialectical nature in historical accounts of curriculum change such studies contribute to research in several ways. Some are chronicles, others offer interpretations while still others contribute synthesis.

The chronicle developed by Rudolph (1977) in his latest work links together the incredible mixture of personalities and institutions over two centuries to give a reasonable picture of American higher education. Brubaker and Rudy (1958) used historical material in a somewhat different way, cross sectionally linked rather than temporally developed, to give a sense of history. Both kinds of endeavors are dependent on the quality of institutional histories. To the extent that these incorporate the dimension of curricular change as substantive development rather than mere curiosities they are worthwhile. A good example is found in the volume dealing with Dickinson College ( ).
Bad examples of institutional histories are easier to find but my favorite quotes are from an account of the University of Michigan set largely in tones of the "old boy" fraternity network which summed up the sixties by noting that;

> a straw poll among seven of the Big Ten universities showed Nixon the winner on every campus including Michigan, suggesting that the majority of students were basically somewhat conservative (1960). . . . Some of the undergraduates focused on a domestic problem: the civil

> rights of Negroes and their integration into American society. . . . The Daily grew shrill in its monomania and accusations, reducing its coverage of other events until it became almost a propaganda organ for the beliefs of its senior editors. It even ignored the Athletic Department's decision to charge students for football tickets in the fall of 1963.
>
> As normally happens a reaction set in, and after about seventy students particpated in the march on Selma, Alabama, in March 1965 the racial issue was eclipsed by concern over the warfare in Viet Nam, inspired by the faculty demonstration. . . . In the fall of 1965 a group of thirty-two students and five minor faculty members felt obliged to demonstrate their objection to United States policy in Viet Nam by setting in the office of the Ann Arbor Draft Board. . . . Convicted a second time, they were given fines and jail sentences. It was a simple and hard lesson.

So much for the sixties in Peckham's history, The Making of the Universiy of Michigan, 1967!*

Additional examples of studies which have gained historical stature because they sensed intuitively the importance of academic programs at a time when few others gave them attention are Tewkesberry and Snow. Careful historical verification has often been seen as a luxury by those preoccupied with "decision making" but the climate is changing toward greater understanding. Under the intellectual leadership of Stone (1976) a set of historical reconstructions have been directed at English, German and Spanish universities over the last four hundred years. These are first rate historical studies. Occasionally they do point up the danger of narrow concentration on a topic that has a natural breadth. There is for example Rothblatt's excellent account of "The Student Sub-culture and The Examination in Early 19th Century Oxbridge" (Stone). The interpretation would have been enriched by adding the insights developed by Snyder (1971), Light (1979) and others on the effects of the "hidden curriculum." In his preface Stone (1976, xi) does set the historian's task, particularly with respect to the curriculum, quite clearly: "to study the interaction between the formal

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* For the antidote see Gamson in Riesman & Stadtman (1973).

institutions of education and the society within which they were set and on behalf of which they were supposed to function."

Not many historians of higher education have been able to achieve such thoroughness but there are several good interpretations in that vein. The lengthy essay by Veysey (Kaysen 19) helps us see the curriculum in relation to society as does the interesting analysis by Sloan (1971). In a recent article Veysey (1981) also lays down an excellent pattern by offering a brief historical account to give "a sense of context," just the right phrase, and then answering a contemporary question. Rather more interpretation than history is Cheit's excellent account of the notion of "utility" in relation to the curriculum (1971). The development of organizing concepts like "utility" for viewing the curriculum over time or in comparison is very necessary. Veysey, again, pointed the way in the study of the university in America (1965).

Historical analyses which carry the process of interrelating society and the curriculum to the point of synthesis are few. Probably the work of Ben David (1972) and Sir Eric Ashbey (1971) come close to exemplary cases even though they search far beyond the curriculum. The study of academic programs needs the perspectives only history can bring. In turn such studies must respect the intellectual substance of the past and draw from it, not simply lift examples to bolster a contemporary position.

The study of "incidents", which is to be read as the consideration of individual cases, ideas, and situations, has grown enormously since 1960, often under impetus from the Carnegie Commission. Case studies of prototypical academic programs across a wide spectrum are found six "profiles," some attentive to curriculum, others not. Gaff's work on

cluster colleges (1970), Keeton's on varied types (1971), and Greeley's review of Catholic institutions are representative as is Floyd Reeves classic, The Liberal Arts College (1932). Bergquist (1981) has put forward a set of curriculum categories that attempts to span all types of curricula at a range of postsecondary institutions.

Another kind of "incident," historical in a different sense, is the development path of an individual during the college years. Good studies in this area are of vital interest to those concerned with curriculum for they are the other side of the coin of learning. The work of Perry (1968), Roy Heath (1964), and Chickering (1969) have advanced this sector of scholarly concern. They also represent a well-spring of ideas for new studies, particularly empirical studies. There are dissertations coming out of the framework and a few "social circles" of researchers are visible.

The description of innovative programs enjoyed a heyday in the late sixties and early seventies. Only a few studies carry through the process of introduction, establishment, evaluation, and retraspection. From a curricular standpoint the Bowen and Douglas (1971) work is exceptional carrying instructional approach through the dimensions of financial analysis. The Keller Plan benefits from extensive presentation in (1974) but a summary of evaluations is still ahead. Summaries of the early stage changes in several innovative programs, really whole institutions come from the Riesman, Gusfield, Gamson volume (1971). Follow-up research on innovations, taken as a whole, is a neglected subject. Even in good case studies of institutions it is sometimes difficult to discern the curriculum or academic program as a discrete factor.

TYPE II - DISTRIBUTIONS AND FREQUENCIES: Norms and Outcomes

Building a quantitative framework within which curricula features can be placed and compared is of fundamental importance. The value of comprehensive data sets is increasing as uncertainty rises and more variability among students, institutions, and programs appears.

NORMATIVE/DESCRIPTIVE STUDIES: Blau (1960) makes the fundamental point that normative factors have two kinds of effects, one through satisfaction to the actor that he/she is doing what is "right," the other from social recognition and approval that one is part of the group.

An important line of normative evidence comes from the analysis of catalogues over time. The work of Dressel and DeLisle (1969), Hefferlin (1961) and Blackburn et al (1976) present a strong line of research that is usually seen as a simple monitoring of change. The introduction of transcript analysis by Blackburn enhances accuracy and adds still another dimension to utility for those who propose a serious examination of the curriculum. Against such a background of range and frequency data individual studies and comparaties studies acquire greater meaning and more explanatory power.

The Carnegie Council survey data on courses per faculty member, catalogue listings etc., is partially reported in Levine's Handbook (1978) but they deserve full presentation. In a recent article Levine (1982) himself shows how such data help with the interpretation of quality. For faculty committees this kind of information gives a perspective on proposals that no amount of discussion and selective citation can achieve.

Another kind of normative data that helps with the analysis of the curriculum is gathered at the boundaries, the point of entry and at the

transition into the employment market. By way of illustration, the follow-up data on liberal arts graduates by Calvert (1969) and the more recent comprehensive work of Solmon, Bisconti et al. (1977) to say nothing of the harsh interpretations of data by Freeman (1976) and Dresch (1976) stimulate careful reconsideration of the curriculum and research on the implications, (Sagan 1979).

Research to create and maintain normative data has several kinds of benefits. Direct interpretation tells us the current state of activity. Comparative interpretations gain validity when the range and frequency of a situation is known, the case in point being the Dressel or Blackburn data noted above. Normative bases also allow subsequent studies to penetrate with more confidence into particular areas, the case in point being studies spawned by labor force entry data.

EFFECTS: The outcomes or effects of the curricular experience, what used to be called "impact studies," also represent an attempt to establish reliable norms. For K-12 completers the "national assessment" (1981) sets out quite simply to describe the ability of a large population cohort to perform in one area, say reading. It is interesting to speculate on the possibility of a national exam or assessment for all college graduates at the time they complete a particular curriculum. The graduate and professional qualifying examinations are sometimes read as a proxy for general performance but a direct simple assessment of cognitive outcomes is rarely taken seriously. The cognitive effects of a particular curriculum are not a major part of research or academic programs.

Developmental effects of curricula have been more thoroughly researched than cognitive outcomes. In several cases "chains" of

research papers are apparent and social circles are active. The work of Perry (1970) wit its stages of development holds out many concepts and relationships that are applicable to and testable in other settings. Heffernan (1975) suggested a framework for inquiry and a number of dissertations have been generated. The recent work of Hacharan and Taber (1979) ties back into the Clark-Trow formulations of fifteen or more years ago. Among the best examples of this kind of "chain" effect is found in the way Pascarella and Terenzini (1976) (1978) (1981) have taken the broad conclusions of Astin (1977) as framework for refining and differentiating the essential notions of interaction with faculty. The recent work of Pace (1979) on the quality of student effort penetrates further into the essentials of the curriculum.

The careful development of outcomes measures for the general education curriculum undertaken by ACT (Forest, Steele 1978) opens a line of interesting research possibilities with thoroughly tests tools. Research along the lines opened by Baird (1976) that links outcomes to particular environments gets close to a central question of linking outcomes to curricular choices.

On the level of the institution a recent article by Zoglin (1981) looks at the question of whether community colleges show adaptability in their curricula. This question of the relationship between institutional policy, tradition, or mission and the curriculum seems to be a necessary prologue to any change in a curriculum but it is seldom explored.

In summary, there are quite a few good conceptual bases for looking at the effects of the curriculum on individual students. Beginnings are visible for chains of research projects that examine, verify, and expand the concepts.

Type III - GENERALLY KNOWN RULES AND STATUSES: Processes and Positions

The curriculum, that is to say any one curriculum, is deeply embedded in its context. This makes it very difficult to isolate as the unit of study. Topics that start out in curriculum drift over into questions of institutional management and policy. But curriculum development is not the same as organizational development and program review is not to be equated with curriculum review. By focusing on the critical kinds of interaction that are closest to the curriculum, the topic may be kept in bounds. How faculty construct and modify a curriculum, the process of academic judgment is one. Selected reaction patterns of students offer another such area.

The case studies in Lindquist (1976) illustrate well the entanglement of curricular matters with other dimensions of institutional activity. The successful cases invite further study of the features that seem to mark them. With respect to students and their reactions to programs we seem finally to have surmounted the validity questions and with the work of Braskamp (1979) began to look at how a feedback loop can be completed.

Expectations and aspirations in relation to the curriculum deserve study and the comparative analysis of Sandberger and Lind (1979) presents a possible approach that bears directly on the design of the curriculum. Phelan (1979) also opens an interesting side of the topic. In the instructional method, a reasonable component of the curriculum, new designs are needed to escape the swamp of simultaneous variables that trap the researcher. Asking a simple question is a simple setting (Thompson, 1980) may offer an exits from the "teaching-learning paradox."

SUMMARY

Beyond the points raised in the paragraphs above, mostly clues from research pieces that involve some aspect of the curriculum, is a larger more uncomfortable matter. The curriculum in postsecondary education is one manifestation of the current structure of knowledge. It has a pattern that reflects the wear of the fabric of knowledge. Toulmin (1977) in one approach and Bruffee (1981) in another suggest that knowledge itself is changing in fundamental ways. To quote Bruffee,

> The result of the twentieth century revolution in the theory of knowledge is that all knowledge is ultimately indeterminate, non-hierarchial, non-individualistic. If so, then what we call knowledge in any field...can only be what have agreed it is...What our students must learn is how human beings continually negotiate and renegotiate the frames of reference which fence in and make meaning for what, for the time being, we agree to call knowledge. This is the concept of knowledge that modern higher education must adjust to and find ways to institutionalize.

The relation between knowledge and the curriculum is the most critical aspect of the field. Methods of researching it and exchange among the researchers will have to be found.

Returning to our original contention (after Crane) that a coherent field of study requires: (1) a cognitive structure (2) a system of social interaction and assessment can be offered. In spite of visible difficulty in isolating and naming the essence of what a postsecondary curriculum is, there are several large conceptual constellations around which a cognitive structure is developing. A normative data base is emerging and waiting to be used for empirical studies. A conceptualization of the "flow" into and through college to the career stage is present. Within that broad framework many good studies are

testing particular questions. Student participation in the curriculum is well studied in many aspects. Less well examined are the relationships of faculty to the curriculum and the links between institutional policy and the curriculum. The systematic "social interaction" among researchers is not strong or consistent, but, after all, that is what sessions like this are for.

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